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STEVEN H. HILFINGER DIRECTOR

ENROLLED BILL ANALYSIS

BILL NUMBER: SB 570

RICK SNYDER

GOVERNOR

TOPIC: Log Wall Construction

SPONSOR: Senator Mike Green

CO-SPONSORS: N/A

COMMITTEE: Senate Regulatory Reform

House Regulatory Reform

DATE INTRODUCED: July 13, 2011

DATE ENROLLED: June 13, 2012

DATE OF ANALYSIS: June 19, 2012

ADMINISTRATION POSITION: Department is neutral on the bill

PROBLEM/BACKGROUND

Log Wall home construction cannot easily comply with the 2009 Michigan Uniform Energy Code. Previous energy codes allowed alternative compliance methods that were based on equivalent annual energy usage.

DESCRIPTION OF BILL

This bill will allow a dwelling unit to be considered to comply with the Michigan Uniform Energy Code if the walls are constructed of a minimum of 5 inch diameter logs, a weighted average u factor of 0.31 for fenestration and a high efficiency heating system is installed.

SUMMARY OF ARGUMENTS

Pro

The provision would provide flexibility and make it easy for builders to comply with the prescription in the law and will result in cost savings for the builder and the buyer. The ICC 400 Standard prescriptive method of compliance would not allow some species of logs, or require larger diameter logs, i.e. 10 inch v 5 inch. If the prescriptive method in ICC 400 Standard is not used, the builder would have to use the test or calculation method. The test method would add cost and the calculation method is very intense.

Con

The prescription in the statute will not assure compliance with the 2009 Michigan Energy Code. Previous codes allow the alternative compliance method based on equivalent annual energy usage. This allowed the builder to increase the insulation in the roof/ceiling cavity and install a high efficiency heating system as an alternative. The current energy code no longer allows this option.

The U.S. Department of Energy pushed to eliminate the aforementioned trade off as the lower efficiency heating equipment is being phased out. The state adopted the 2009 International Energy Conservation Code to qualify for certain federal funding. Michigan received \$82 million in stimulus monies in 2009 as a result of this adoption.

The current Michigan energy code would require log wall homes to comply with chapter 3 of the ICC 400 Standard on the Design and Construction of Log Structures. The mass wall prescriptive compliance is based on the specific gravity of the species of log. From tables 302.2(5) and 305.3.1, a 5 inch log would require a minimum specific gravity of .54 to comply. This would mean that the logs would need to be longleaf or northern pine or oak. If other species were used the log diameter would need to be larger for compliance. If a 5 inch log with a lesser specific gravity is used heating costs may be higher on an annual basis.

FISCAL/ECONOMIC IMPACT

Are there revenue or budgetary implications in the bill to the -

(a) Department

Budgetary: None

Revenue: None

Comments:

(b) State

Budgetary: None

Revenue: None

Comments:

(c) Local Government

Comments:

<u>OTHER STATE DEPARTMENTS</u>

ANY OTHER PERTINENT INFORMATION

ADMINISTRATIVE RULES IMPACT

A rule referencing the requirement would need to be incorporated into the Michigan Building Code for clarity and consistency.